

REMARKS

Summary

In the Final Rejection dated November 8, 2007, claims 1-7, 9-15 and 25-33 were rejected under 35 U.S.C. § 112, first and second paragraphs, claims 1, 3-6, 11-13, 25 and 29-33 were rejected as anticipated by *Claff* (U.S. Patent 2,008,608) under 35 U.S.C. § 102(b), claims 1-7 and 11-15 were rejected as anticipated by *Walsh* (U.S. Patent 5,108,355) under 35 U.S.C. § 102(b), claims 9 and 10 were rejected as unpatentable over *Claff* or *Walsh* in view of Lang (U.S. Patent 5,147,480) under 35 U.S.C. § 103(a), and claims 26-28 and 30-33 were rejected as unpatentable over *Claff* in view of *Walsh*, under 35 U.S.C. § 103(a). Claims 40-76 were withdrawn from consideration under 37 CFR 1.142(b), as being directed to a non-elected invention.

Upon entry of the present Amendment, claims 1-3, 5-7, 9-11, 13-15, 25-29, and 31-33 will have been amended, claims 4, 8, 12, 16-24, 30, and 34-76 will have been canceled, and claims 1-3, 5-7, 9-11, 13-15, 25-29 and 31-33 will remain pending in the application.

Interview Summary

Applicant thanks the Examiner for the opportunity to discuss the merits of the rejections and the proposed amendments to the claims. Applicant's positions have been memorialized in the remarks provided herein and have focused on the amendments to the claims shown above.

Response to Rejection Under 35 U.S.C. § 112

Claims 1-7, 9-15 and 25-33 were rejected under 35 U.S.C. § 112, first and second paragraphs. These rejections are based essentially on the Examiner's finding that the recitation in claims 1 and 25 that the ribbon of reinforcing material is positioned on and adhered to substantially all of, "but not beyond", a selected panel portion of the web is new matter. Applicant traverses these rejections.

Upon review of the record in this case, it appears that there is some confusion as to the claim term “panel portion”. This term refers to the longitudinally extending portions of the web that lie between adjacent longitudinally extending fold lines or between a longitudinally extending fold line and an edge of the web. When the web and adhered ribbon(s) are subsequently formed into carton blanks, the panel portions each become a plurality of panels. For example, considering the carton blank shown in Fig. 3 of the application, the area between longitudinally extending fold lines 53 is a first panel portion, the area between left-hand fold line 53 and the left-hand edge of the blank is a second panel portion, and the area between the right-hand fold line 53 and the right-hand edge of the blank is a third panel portion. Thus, the longitudinally extending panel portions are separated by fold lines 53. When the transverse fold lines 52 are formed, the first panel portion, for example, becomes a plurality of panels 54, 56 and 57, and so on. Similarly, the carton shown in Fig. 8 has longitudinally extending panel portions separated by fold lines 125. These panel portions each become a plurality of panels, e.g., panels 124, when the web is transversely cut to form the carton blanks.

Claims 1 and 25 have been amended to specify in step (a) that the longitudinally extending panel portions “will each become a plurality of panels, the longitudinally extending panel portions being separated by longitudinal fold lines.” Also, step (b) has been amended to specify that a first ribbon and a second ribbon of reinforcing material are progressively applied to the advancing web and that the first ribbon and the second ribbon are positioned to overlie and adhere to substantially all of, but not beyond, a first longitudinally extending panel portion and a second longitudinally extending panel portion and do not extend across the longitudinal fold lines. These claim amendments clarify the “but not beyond” limitation rejected under 35 U.S.C. § 112 rejected by the Examiner. This “but not beyond” limitation is also supported by the

specification, for example in Figs. 3 to 5 and the accompanying disclosure at page 25, line 7, to page 26, line 9, as well as Fig. 8 and the disclosure at page 33, lines 4 to 23. As shown in Fig. 3, ribbons 62 cover substantially all of the panel portions lying between the fold lines 53 and each edge of the blank, but, since their edges are spaced a predetermined short distance from fold lines 53, as described at page 25, line 16, to page 26, line 9, the ribbons do not cross the longitudinal fold lines and therefore do not extend beyond their respective panel portions. Likewise, as shown in Fig. 8, ribbons 123 cover substantially all of the panel portions 124 lying between the longitudinally extending fold lines 125, but do not extend beyond their respective panel portions.

Accordingly, it is believed that the rejection of the claims under the first and second paragraphs of 35 U.S.C. § 112 has been overcome, and it is requested that the rejection be withdrawn.

Response to Rejections Under 35 U.S.C. § 102(b)

Claff

Claims 1, 3-6, 11-13, 25 and 29-33 were rejected under 35 U.S.C. §102(b) as being anticipated by *Claff*. Applicant traverses these rejections.

In the method disclosed by *Claff*, strips of adhesive tape 2 are adhered to a web of box-board material. Portion 3 of the tape covers part of the box side walls while portion 4 of the tape covers part of the box's bottom (p. 1, col. 2, lines 29 to 41). After the tape is applied, the web is scored longitudinally at 6 and transversely at 7 to define the bottom portion 8, side flaps 9 and end flaps 10 (p. 1, col. 2, lines 44 to 48). As *Claff* shows in Figs. 4 and 5, when the blank is folded at the score lines into a box, the tape 2 extends around the thus-formed corner on the side of the web opposite the score line. This construction reinforces the corners of the box against tearing (p. 1, col. 1, lines 37 and 38; p. 2, col. 1, lines 9 to 21).

By contrast, a reinforced carton blank formed by Applicant's claimed method is reinforced in an entirely different manner than in *Claff*. In the presently claimed method, the ribbons of reinforcing material each are positioned to overlies and adhere to substantially all of, but not beyond, a longitudinally extending panel portion, thus not crossing longitudinal fold lines. In contrast, in the method disclosed by *Claff* the tape (ribbon) 2 covers not only all of the panel portion between the fold line 6 and the edge of the web 1, but also extends beyond the panel portion to cover part of the central panel portion between the score lines 6. Accordingly, the amended claims are not anticipated by *Claff* and rejection based thereupon should be withdrawn.

Additionally, it would not have been obvious to confine *Claff's* tapes 2 to the panel portions so that they would not extend beyond the panel portions and would not cover the longitudinal score lines 6. Such a modification of *Claff* would not have been obvious because, as discussed above, *Claff* teaches that the purpose of his method is to reinforce the corners of the box--a purpose that would not be achieved if tapes 2 did not cover the locations of score lines 6.

Walsh

Claims 1-7 and 11-15 were rejected under 35 U.S.C. §102(b) as anticipated by *Walsh*. Applicant traverses these rejections.

The method disclosed by *Walsh* is fundamentally different from that presently claimed for at least the reasons that (1) *Walsh* fails to disclose adhering a "ribbon" of reinforcing material and (2) the method of *Walsh* applies to pre-cut blanks, not to a continuous web as claimed. Moreover, with regard to the claims as amended, *Walsh* does not disclose adhering a plurality of "ribbons" to the "web".

Walsh fails to disclose adhering ribbons of reinforcing material as presently claimed. Instead, *Walsh* discloses a "batch" method in which carton blanks 10 are first cut, and then a precut reinforcing insert panel 60 is adhered to each carton blank. By contrast, Applicant's method is a "continuous" method, in which ribbons of reinforcing material are adhered to a web of paperboard, prior to cutting the carton blanks from the web. The process disclosed by *Walsh* exemplifies a need which Applicant's invention is intended to fill. *Walsh* requires a specialized machine, labeled in his figures as 80 or 120, to attach the reinforcing panels, whereas Applicant's method advantageously can be performed on traditional machinery. As Applicant discloses at page 7, line 22 to page 8, line 2:

A related need exists for an efficient and cost effective method of making such paperboard cartons that uses traditional paperboard carton fabrication machinery and that does not substantially increase material costs associated with the fabrication process.

In contrast to *Walsh*, claim 1 requires "progressively applying and adhering at least a first ribbon and a second ribbon of reinforcing material to the advancing web of noncorrugated paperboard." As disclosed by Applicant, ribbons 21 of reinforcing material are elongated strips that are fed from rolls 19; this is consistent with the dictionary definition of a ribbon as "1. a woven strip or band of fine material, as silk, rayon, etc., finished off at the edges, and ranging in width, used for ornament, tying, etc. . . . 3. anything resembling or suggesting a ribbon or woven band."¹ The Examiner identifies element 60 of *Walsh* as a "ribbon," but Applicant submits that this is far beyond the broadest reasonable interpretation of the term. *Walsh's* element 60 is an insert panel which, as shown in the patent, is simply a rectangular panel sized to fit in the carton blank 10. Panel 60 does not resemble anything that one of ordinary skill in the art would

¹ See the copy of page 1043 of *The American College Dictionary* (1961), submitted with the amendment filed on Sept. 27, 2007.

normally consider to be a ribbon, and neither corresponds in shape to the ribbons disclosed by Applicant nor falls within the ordinary meaning of a "ribbon" as defined in the dictionary, *supra*.

Walsh applies reinforcement to pre-cut blanks, not to a continuous web. Claim 1 recites that the ribbon of reinforcing material is adhered "to the advancing web of noncorrugated paperboard," and "cutting the web of noncorrugated paperboard to form carton blanks having panels." *Walsh* does not meet these limitations. In the *Walsh* method, "ribbon" 60 is not adhered to a web, but to a precut carton blank 10. Even assuming (which *Walsh* does not disclose) that the carton blank 10 of *Walsh* was cut from a web of paperboard, the method disclosed by *Walsh* fails to anticipate or render obvious claim 1, since the claimed method provides that the ribbon is adhered to the web prior to being cut from the web, rather than (as in *Walsh*) adhering a so-called "ribbon" to a carton blank that has already been cut.

In view of these differences between the method recited in claim 1 and the method disclosed by *Walsh*, *Walsh* does not anticipate claim 1 and the claims dependent thereon. Further, *Walsh* fails to teach or suggest modification thereof to render such claim obvious in view of its teachings.

Response to Rejections Under 35 U.S.C. § 103(a)

Claff or Walsh in View of Lang

Claims 9 and 10 were rejected as unpatentable over *Claff* or *Walsh* in view of *Lang*. Applicant traverses these rejections.

Lang is cited as evidence of the obviousness of printing on reinforcing strips. However, since *Lang* fails to make up for the deficiencies of *Claff* and *Walsh*, rejections based thereupon are moot in view of the amended claims as pending. Accordingly, claims 9 and 10 are patentable on their own merits, and as inheriting allowable subject matter from claim 1.

Claff in view of Walsh

Claims 26-28 and 30-33 were rejected as being unpatentable over *Claff* in view of *Walsh*. Applicant traverses these rejections.

With respect to claims 26-28, the Examiner asserts that, in view of *Walsh*, it would have been obvious to use paperboard reinforcing material in the method of *Claff*. While Applicant disagrees with this assertion, further discussion of these rejections is unnecessary since the proposed combination fails to overcome the deficiencies discussed above with regard to the rejection of parent claim 25 as unpatentable over *Claff*. Consequently, claims 26-28 are allowable on their own merits, and as inheriting allowable subject matter from claim 25.

With respect to claims 30-33, the Examiner asserts that it would have been obvious in view of *Walsh* to position reinforcing material in the *Claff* method “fully within the panel boundaries defined by opposing fold lines.” This rejection is respectfully traversed. *Walsh* would not suggest to one of ordinary skill in the art positioning *Claff*'s reinforcing material 2 entirely within the panel boundaries defined by fold (score) lines 6, because, as discussed above, the purpose of the *Claff* method is to reinforce the corners of the box. Positioning *Claff*'s reinforcing material 2 so that it did not cover score lines 6 would defeat this purpose, since the corners (e.g., at score lines 6) would not be reinforced if score lines 6 were not covered by reinforcing material 2. Moreover, *Walsh* shows that the edges 65, 67 of the insert panel 60 are not aligned with the edges 15, 17 of the carton blank 10; see Figs. 2 and 4. This construction shown in *Walsh* would not be accomplished by the *Claff* method. When cut from web 1, the carton blank of *Claff* is cut along line 13, which passes through the web and the attached reinforcing material 2 (see Fig. 1 and p. 1, col. 2, line 55 to p. 2, col. 1, line 6). There is no disclosure in *Claff*, nor is it apparent, how one could cut the blank from the web so that the ends

of the reinforcing tape 2 would not be aligned with the ends of the blank at cut line 13. Since modifying the *Claff* method in view of *Walsh* would negate a stated purpose of the *Claff* method, and, in any event, could not be accomplished by the *Claff* method, rejections of claims 30-33 based thereupon should be withdrawn.

Withdrawn Claims

Claims 40-76 were withdrawn from consideration under 37 CFR 1.142(b), as being directed to a non-elected invention. In order to expedite prosecution, claims 40-76 have been canceled. However, pursuant to 35 U.S.C. § 121, Applicant reserves the right to present the subject matter of those claims in a subsequent application.

Remarks Regarding *Balin*

In connection with the claimed invention, Applicant wishes to call the Examiner's attention to *Balin* (U.S. Patent 4,905,864). *Balin* was cited in the Information Disclosure Statement that was filed on April 1, 2002, and considered by the Examiner (initialed) on May 22, 2002. However, *Balin* has not been applied in rejecting any claims in this application. Although the examiner is urged to consider *Balin* in detail for himself, for his convenience, the following is provided as an overview of parts of *Balin* that Applicant believes most relevant to the presently claimed invention.

Balin discloses a method of making carton blanks from a material SW, which may be solid (noncorrugated) fiberboard (col. 3, lines 60 to 65). Portions of the blank may be reinforced by adhering a layer of material SF thereto. In the blank shown in Fig. 2, the blank is reinforced by layer SF attached to the blank between horizontal score lines 10, 12, the layer SF being "limited in its outline to the outline of the side and end panels 2 and 4" between the horizontal

score lines (col. 3, lines 34 and 35), with the “edge 24 of the SF-layer [being] close to the score 10” (col. 3, lines 37 and 38). *Balin* further discloses in Figs. 8 and 9, an apparatus where a strip of reinforcing material SF is glued to layer SW (col. 3, line 66, to col. 4, line 18), and then scoring tool 34 is used to prepare scores corresponding to the horizontal scores 10 and 12 of Fig. 2 (col. 4, lines 19 to 24). *Balin* shows in Fig. 8 the reinforcing layer consisting of facing layer 20 and corrugated member 22, but discloses at col. 4, lines 35 to 38, that instead of the layer SF a layer of simple corrugated medium without facing could be used. *Balin* also discloses at col. 4, lines 25 to 30, that two separate SF strips could be attached to an SW layer twice the width of the carton blank, and then the twin blank split lengthwise. Thus, *Balin* discloses making the paperboard carton blank shown in Fig. 2 by advancing a web of noncorrugated paperboard SW along a path, applying and adhering a ribbon SF of reinforcing material on the web between horizontal score lines 10, 12.

Independent claims 1 and 25 have been amended to recite a method of making a paperboard carton where a first ribbon and a second ribbon of reinforcing material are applied to a web, with the first ribbon being positioned on and adhered to substantially all of, but not beyond, a first panel portion, and the second ribbon being positioned on and adhered to substantially all of, but not beyond, a second panel portion. Neither the first ribbon nor the second ribbon extends across the longitudinal fold lines and both the first ribbon and the second ribbon reinforce the carton. In contrast, *Balin* only applies one ribbon of reinforcing material to a carton blank (*Balin*'s formation of two cartons simultaneously creates two cartons, not one-- i.e., only one ribbon is applied to each *Balin* carton). Moreover, Applicant submits that it would not have been obvious to modify the *Balin* process to apply multiple reinforcing ribbons to a single carton blank since *Balin* teaches that his process saves material by reinforcing only the

walls (panels) of the container blank, and not the top and bottom flaps, which do not need reinforcement (col. 1, line 61 to col. 2, line 18).

The dependent claims have also been amended, where appropriate, to correspond to the amendment of their parent claims.

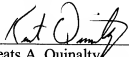
Conclusion

In view of the foregoing, Applicant submits that the claims now pending in the application are patentable over the cited art, and requests that the rejections be withdrawn and the application passed to issue. If any issues remain unresolved, however, Applicant's attorney would welcome a telephone conference with the Examiner in order to resolve them.

The Commissioner is hereby authorized to charge any fees that may be required for the timely consideration of this Amendment to Deposit Account No. 09-0528.

Respectfully submitted,

4/7/08
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